concurrently irradiating the surface of said wafer under polishing processing with light having predetermined characteristics;

detecting respective reflected lights from the insulating film on said wafer surface generated by the irradiation;

detecting an endpoint of polishing processing on the film on the basis of at least an intensity of the detected reflected lights;

stopping polishing processing of said wafer on which the endpoint is detected;

detaching the wafer whose polishing processing is stopped from said polishing processing machine; and

forming a new wiring pattern on said insulating film of the wafer detached from said polishing processing machine.

Please add the following new claims:

--24. A method of manufacturing a semiconductor device according to claim 9, wherein the detecting an endpoint of polishing processing on the film on the basis of at least an intensity of the detected reflected lights includes detecting on the basis of a relationship between intensities of the detected reflected lights.

25. A method of manufacturing a semiconductor device according to claim 24, wherein the light having predetermined characteristics includes light having two or more different wavelengths.

26. A method of manufacturing a semiconductor device according to claim 25, wherein the detecting an endpoint polishing processing is detected on the basis of an intensity ratio of the detected reflected lights.